Assessing and managing impacts: Social and equity concerns
Managing impacts:
Using carbon pricing revenue and leveraging complementary policies

Assessing impacts:
Methods and approaches to assessing social impacts of a carbon price

Channels of impact:
Workers, households and fairness issues

Broader context:
Stakeholder mapping and engagement, Just Transition
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Assessing Impact: Context

**Just Transition:** Need to ensure the benefits of the green economy transition are shared widely and supporting those who might “lose out” – be it regions, workers, industries or communities.

**Green jobs** may not be created in the same place where jobs are lost and transitioning from brown to green industries will require additional support policies.

Distributional impacts is an issue that has to be considered regardless of whether or not you use a carbon price: how does carbon pricing change this?

**Carbon price:** Does it create new winners and losers? How can it be designed to support a Just Transition beyond just driving mitigation?

How do I preserve the carbon price incentive while supporting an equitable transition?
The impact of carbon pricing on key stakeholders is of crucial importance to governments, as it can influence both the effectiveness of the policy and its political success.

Carbon pricing will create winners and losers across society, even if the overall impacts of carbon pricing are small.
• Identifying relevant stakeholders and engaging with them early on and consistently through the ETS design and implementation process can help build a robust policy.

• When looking at equity and social issues: the impact of a carbon price on households and businesses can be two groups to consider.
ETS Impacts: Workers

While a green transition generally sees a net creation of jobs, these aren’t necessarily created where jobs are lost.

• Emissions intensive sectors reduce output and jobs
• For instance, coal production will likely see significant losses, and these are often geographically concentrated

In Canada, the province of Alberta accounts for 65% of coal-fired electricity generation, where the coal phaseout will lead to approximately 2,000-3,000 jobs being phased out by 2030.

In the EU in 2020, 200,000 people were employed in the coal sector. Without support, it was estimated that around 160,000 of those jobs could be lost.
ETS Impacts: Households

- Additional expenses for energy and fossil intensive products as entities pass on the carbon price to consumers
  - Depending on coverage ➔ increase in basic commodity costs, already a challenging topic given recent high energy prices
- Overall impact on household income and energy consumption will depend on underlying economic conditions in a jurisdiction
- To support lower income households, the Regional Greenhouse Gas Initiative (RGGI), requires at least 25% of revenue be used for low-income efficiency investments, which reduces electricity cost of electricity (even as the price may increase)
ETS Impacts: Fairness California

Ensuring benefits of reduced emissions (cleaner air, increased mobility options) are equally distributed and cost of a carbon price does not overly burden certain groups

California requires at least 35% revenue to be spent on projects that benefit disadvantaged communities (Cumulatively, 74% or $7.2 billion+ of implemented project funding benefits priority populations.

Offsets: Alongside limits for offset use, no more than 50% of offsets can come from projects that do not provide direct environmental benefits in the state
CUMULATIVE PROJECT ACHIEVEMENTS
As of May 2023

$9.8 billion implemented through May 2023

**GHG**
- 98.0 MMTCO₂e estimated GHG emissions reductions

**Individual Projects**
- 569,477 individual projects implemented

**Housing**
- 11,402 affordable housing units under contract

**Transportation**
- 1,079 transit agency projects funded, adding or expanding transit service

**Electric Vehicles**
- 415,900+ rebates issued for zero-emission and plug-in hybrid vehicles

**Trees**
- 217,763 urban trees

**Conservation**
- 928,000+ acres of land conservation or restoration

$7.2 billion+ (74%) benefiting priority populations
ETS Impacts: Fairness (Germany)

- Germany launched national ETS (2021) for transport and building sector and conducted an analysis to assess impact of carbon price on households.
- A set of measures and design decisions were made to manage the social impact of the carbon price, including adjustments to the ETS design, like an initially regulated allowance price (from EUR25 to EUR55-65 over time).
Other complementary policies and supporting measures included:

• **Targeted relief to manage commodity prices**: reducing power prices and increasing commuter tax relief
• **Targeting aid to vulnerable groups**: housing allowance for lower income households was increased
• **Implementing programs to encourage greener options**: 2030 Climate Action Program promoted complementary policies that support green substitution options
How to assess impacts

**UK**: 5 characteristics to assess impact of carbon tax on households: income, occupancy, fuel type used, fuel poverty status of the household, and tenure and construction features. Results presented by region and income level

- Rising energy costs, rather than the carbon tax, are generally the largest driver of bill increases
- Without recycling revenues, carbon tax has regressive impacts on household bills
- Recycling 33% of revenue to pay for EE can mitigate bill increases from the carbon tax
- Also considered distributive effects between households with similar incomes to ensure that carbon pricing can be designed to prevent a rise in fuel poverty
Managing Impacts: Revenue use

Can you lean on or adjust existing policies to manage social impacts? Complementary policies can also strengthen the effectiveness of a carbon pricing signal (e.g. public transport access).

Jurisdictions use revenue to achieve multiple policy goals.

How revenue has a significant effect on the impact of a carbon price on a jurisdiction.
# Revenue use: Fairness

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<th>Pros</th>
<th>Cons</th>
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<td>Lump sum payments</td>
<td>Strongly progressive and can be highly visible</td>
<td>Complex administered (national circumstances) No additional effect on climate</td>
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<td>Lowering other taxes</td>
<td>Increases the efficiency of the tax system</td>
<td>Reaches only tax payers Low-income segment needs to be targeted specifically</td>
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<tr>
<td>Subsidies and transfer</td>
<td>Increases social transfer Subsidies for low-carbon technology reduce burden Double climate divided</td>
<td>Reaches only transfer recipients Who benefit from which subsidies (clean vehicles and fuels, transportation infrastructure)?</td>
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<td>Cost reduction of electricity</td>
<td>Promotes electrification and sector coupling</td>
<td>Risk of rebound effects No incentive for energy efficiency</td>
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